

EXHIBIT 10
to Declaration of Jennifer Rae Lovko

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION**

RETHINK35, et al., §
§
Plaintiffs, §
§
v. § CIVIL ACTION NO. 1:24-CV-00092
§
TEXAS DEPARTMENT OF §
TRANSPORTATION, et al. §
§
Defendant. §

PLAINTIFFS' FEDERAL RULES OF CIVIL PROCEDURE, RULE 26 DISCLOSURE

Pursuant to Rule 26(a), Plaintiffs provide the following disclosure to Defendant TEXAS DEPARTMENT OF TRANSPORTATION. Plaintiffs expressly reserve the right to supplement and/or amend this disclosure as appropriate during the course of this action.

I. Rule 26(a)(1)(A) Initial Disclosures

(i) the name and, if known, the address and telephone number of each individual likely to have discoverable information—along with the subjects of that information—that the disclosing party may use to support its claims or defenses, unless the use would be solely for impeachment:

Plaintiff currently is not aware of any lay witness with discoverable information.

(ii) a copy—or a description by category and location—of all documents, electronically stored information, and tangible things that the disclosing party has in its possession, custody, or control and may use to support its claims or defenses, unless the use would be solely for impeachment:

Plaintiff identifies the following documents, which were made available to Defendant previously as attachments to Plaintiffs' Motion to Complete and Supplement the Administrative Record and, in the Alternative, Request for Judicial Notice (ECF 48-50): (1) Austin, Tex. Amendment #2 to Final Project Plan and Reinvestment Zone Financing Plan, (2) U.S. EPA, EPA to Reexamine Health Standards for Harmful Soot that Previous Administration Left Unchanged (June 10, 2021), (3) U.S. EPA, EPA Proposes to Strengthen Air Quality Standards to Protect the Public from Harmful Effects of Soot (January 6, 2023), (4) U.S. EPA, Supplement to the 2019 Integrated Science Assessment for Particulate Matter (May 2022), (5) U.S. Fish & Wildlife Services, Interactive Map (showing habitat of the Texas fatmucket), (6) US EPA, Final Guidance for Consideration of Environmental Justice in Clean Air Act 309 Reviews (Jul. 1999), (7) City of Austin Comments on 1-35 Capital Express Central (Dec. 29, 2020), (8) Austin, Tex. Resolution 202310-045 (October 19, 2023), (9) City of Austin Environmental Commission. Austin and the EPA's PM2.5 NAAQS (June 7, 2023), (10) Travis County, Commissioners Court-Approved Letter to Texas Department of Transportation (February 28, 2023; Sept. 26, 2023), (11) Austin City Council Members Zo Qadri, Chilo Vela and Ryan Alter. Joint Statement on 1-35 Update (July 31, 2023), (12) 88 FR 5558 (January 23, 2023), (13) 89 FR 16202 (March 6, 2024).

(iii) a computation of each category of damages claimed by the disclosing party—who must also make available for inspection and copying as under Rule 34 the documents or other evidentiary material, unless privileged or protected from disclosure, on which each computation is based, including materials bearing on the nature and extent of injuries suffered:

Plaintiffs only seek declaratory and injunctive relief, as well as an award of Plaintiffs' costs of litigation, including reasonable attorney's fees.

(iv) for inspection and copying as under Rule 34, any insurance agreement under which

an insurance business may be liable to satisfy all or part of a possible judgment in the action or to indemnify or reimburse for payments made to satisfy the judgment:

Not applicable.

II. Rule 26(a)(2) Disclosure of Expert Testimony

Plaintiff identifies Krish Vijayaraghavan as a retained expert in this case. Mr. Vijayaraghavan can be contacted through Plaintiffs' Counsel. He has been retained as an expert with knowledge regarding NEPA environmental reviews and air quality modeling. Based upon his experience, review of the administrative record, review of documents associated with the U.S. Environmental Protection Agency's new rule for Particulate Matter NAAQS, and review of applicable literature, Mr. Vijayaraghavan may offer opinions regarding the need for a supplemental EIS in light of the new NAAQS for Particulate Matter (PM). *See Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 560 (9th Cir. 2000). He also may offer testimony for the limited purpose of explaining technical terms or complex evidence associated with adoption of the I-35 Capital Express Central Project from US 290 East to US 290 West/SH71. *See Inland Empire Public Lands Council v. Glickman*, 88 F.3d 697, 703-04 (9th Cir. 1996); *Animal Defense Council v. Hodel*, 840 F.2d 1432, 1436-37 (9th Cir. 1988).

Plaintiffs anticipate Mr. Vijayaraghavan will prepare a report, and this report will be provided to Defendant promptly upon Plaintiffs' receipt in a supplemental disclosure. Mr. Vijayaraghavan's CV is attached hereto.

Dated: November 7, 2024

By:



Rachel S. Doughty
Jennifer Rae Lovko
GREENFIRE LAW, PC
Attorneys for Plaintiffs

KRISH VIJAYARAGHAVAN

Principal

Mr. Krish Vijayaraghavan has over 20 years' experience in environmental practice and specializes in NEPA environmental reviews and air quality modeling. He has coordinated Environmental Impact Statements (EIS) & Environmental Assessments (EA) for aviation, surface transportation, mining, natural gas, and energy projects. Krish has expertise in air quality and greenhouse gas/climate change analysis, social cost of carbon calculations, and linkages with water quality and human health and ecological risk assessments. He has directed modeling studies of photochemical air pollution (ozone, secondary PM_{2.5}), sulfur and nitrogen oxides, primary particulates, ammonia, PFAS and deposition of air toxics such as mercury, and analysis of methane, CO₂, N₂O, and environmental justice impacts. Krish has published over 40 peer-reviewed technical papers in journals and has provided expert witness testimony. He has published on the relationship between air quality and climate change on a NASA grant. He has published over forty peer-reviewed research papers and co-authored two technical books. Krish has moderated NEPA professional training workshops in the U.S. to teach the fundamentals of Categorical Exclusions, EAs and EISs.



CONTACT INFORMATION

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EDUCATION

MS, Environmental Engineering Georgia Institute of Technology, Atlanta

MS, Chemical Engineering University of Kansas, Lawrence

BTech, Chemical Engineering Indian Institute of Technology, Mumbai

SELECTED PROJECTS

NEPA EA for Dallas Fort Worth Airport Expansion

Technical advisor for the EA required under NEPA to assess the air quality, GHG and environmental justice impacts of a terminal expansion and other infrastructure upgrades at Dallas Airport. Services included preparation of the Affected Environment and Environmental Consequences sections of the EA and development of construction emissions inventories of criteria and hazardous air pollutants and greenhouses gases using ACEIT, MOVES and other data, assessment of environmental justice impacts and calculation of the social cost of carbon. A general conformity analysis was performed to assess construction and operation effects in the ozone nonattainment area. Led the description of the effects of climate change on the region and GHG mitigation measures required under CEQ NEPA regulations.

NEPA EIS for Corporate Average Fuel Economy (CAFE) Standards

The National Highway Transportation Safety Administration (NHTSA) prepared two Environmental Impact Statements (EIS) to assess the nationwide environmental benefits of the Corporate Average Fuel Economy (CAFE) standards and the prior Safer Affordable Fuel-Efficient (SAFE). Provided technical oversight for emissions modeling for light duty vehicles, photochemical air quality modeling to assess criteria air pollutant impacts among alternatives and preparation of technical support documentation for the EIS.



NEPA EIS for Electric High-Speed Rail

Senior NEPA Advisor for the EIS for a speed electric rail expansion from Hesperia to southern California. Led technical review of air quality and greenhouse gas technical assessments required under NEPA. Reviewed criteria pollutant emissions inventories, traffic hot spot analysis, CALEEMOD modeling, general conformity analysis, greenhouse gas inventories and technical support documentation for the NEPA document. Guided the analysis of the benefits of avoided GHGs from the electric rail versus highways.

Assessment of Effect of Motor Vehicle Standards on Air Quality

Investigated the effects of past, present and potential future emissions, and fuel standards on motor vehicles in the U.S. on ambient ozone and PM_{2.5} concentrations using emissions, meteorological and air quality modeling with MOVES, WRF, SMOKE and CAMx models. Studied trends in mobile emissions and air quality in Atlanta. Results were published in the journals "Atmospheric Environment" and the "Journal of the Air and Waste Management Association".

NEPA EA and Categorical Exclusion for Ontario Airport

Ontario airport is undertaking multi-million-dollar infrastructure improvements for a proposed cargo warehouse and runway improvements. Provided strategic guidance on air modeling and analysis of aviation impacts under NEPA including leveraging the SIP, air quality model revisions, and appropriate analyses for Federal Aviation Administration CatEx vs. EA.

NEPA EA for Solar Photovoltaic Facility

Supported a renewable energy provider during the EA process to assess impacts from construction of a utility-scale photovoltaic solar and battery storage facility on federal land in New Mexico producing 372 megawatts of electricity. Coordinated the development of a fugitive dust control plan and air quality and greenhouse gas assessments. Oversaw the preparation of technical documentation for the Affected Environment and Environmental Consequences NEPA sections.

NEPA EIS for Paradox Valley Unit

Supported the U.S. Bureau of Reclamation in the analysis of their proposed action under NEPA to construct and operate facilities for the collection and disposal of saline groundwater at Paradox Valley. Technical lead for the air quality analysis for this project which involved a new injection well, access roads, bridges, an easement from the Colorado Department of Transportation and a treatment plant as needed. Developed a detailed emissions inventory of criteria/hazardous air pollutants and GHGs from mobile sources, stationary sources, and fugitive dust during construction/operation under the NEPA alternatives.

NEPA EA for US Air Force Training Activities

The US Air Force prepared an Environmental Assessment as required under NEPA for the proposed construction and operation of an air force training range in Montana. Led the development of construction and operations emissions inventories of criteria pollutants and greenhouse gases (CO₂, CH₄ and N₂O) using US Air Force Guidance, aircraft emission factors, EPA AP-42 guidance, and other data for the EA. Prepared documentation comparing the NEPA alternatives.

NEPA EA for Decommissioning of Generating Station and Mine

Led air quality and climate change analyses for the EA required under NEPA for the retirement of a coal-fired power plant and coal mine in Arizona. Sources analyzed included the electric generating utility stacks, auxiliary equipment, transmission lines, generators, tanks, on-road and nonroad sources and fugitive emissions. Direct, indirect, and cumulative effects were assessed for air quality for NAAQS compliance and visibility and deposition at nearby national parks and forests and other federal Class I and II areas. Coordinated with the NEPA human health and safety and ecological resource specialists to assess the health impacts of air deposition.



NEPA EIS for Gold Mine

Senior NEPA Advisor for an EA and EIS required to assess the modification of the mine plan of operations for a gold mine in California. Reviewed emissions inventories for criteria and hazardous air pollutants, dispersion modeling methods, responses to USEPA comments and technical documentation for the EA. Reviewed proposed modeling approach for assessing air and GHG impacts of mine expansion. Reviewed the development of emissions inventories of methane, CO₂ and N₂O, and calculation of social cost of GHGs and other climate change impact assessment metrics following CEQ regulations.

NEPA EIS and RMP for BLM Big Game Corridors

NEPA Specialist and Technical Lead for Air Quality and GHG-Climate. The purpose of this EIS was to adopt Bureau of Land Management (BLM) Resource Management Plans to restrict oil and gas production on federal lands to protect the habitat of big game in Colorado. The scope involved development of oil and gas emissions inventories for criteria and hazardous air pollutants and GHGs for alternatives with stipulations and limitations in selected areas with big game habitat, tiering to prior BLM modeling, preparation of GHG emissions for RFDs, preparation of NEPA chapters, and agency discussions.

Florida Mercury TMDL Study

Assisted Florida electric utilities in a study of the sources of atmospheric mercury deposition to Florida and conducted discussions with the Florida DEP on the proposed statewide mercury Total Maximum Daily Load (TMDL) regulations. The Florida mercury TMDL was derived after examination of other TMDLs including the Minnesota statewide TMDL, the Northeast regional TMDL and the Arkansas TMDL. Also performed a statistical analysis of temporal trends in Hg emissions and deposition in Florida and presented findings at the 10th International Conf. on Mercury as a Global Pollutant in Halifax, Canada.

NEPA EIS for BLM Resource Development Plan and EIS

Led the Air Quality and Climate Change Analysis for the NEPA EIS and Resource Management Plan (RMP) for the U.S. BLM North Dakota Field Office to inform the assessment of the impact of oil and natural gas and mining activities on federal lands and other indirect and cumulative sources. Conducted air quality modeling with CAMx for PM_{2.5}, PM₁₀, ozone, CO, NO_x and other criteria pollutants and air quality related values such as atmospheric deposition and visibility impairment at federal Class I areas and tribal reservations.

Colorado Air Resource Management Modeling Study (CARMMS)

Technical Lead for the BLM CARMMS studies that assessed the air quality and GHG/climate change impacts of new federal mining and oil and natural gas (methane), coal and oil power plants, cement plants and other cumulative emission sources in each of the BLM Colorado Field Office planning areas. Emissions inventories were developed for multiple emission scenarios for future years for criteria/hazardous air pollutants and GHGs. Modeling was performed with CAMx with over 20 source apportionment groups for ozone and PM precursor emissions. Meteorological inputs were prepared for AERMOD and CALPUFF modeling. This pioneering study serves as the programmatic basis for several NEPA EAs in Colorado.

NEPA EIS for Potash Mine

Provided NEPA oversight for the air dispersion modeling and preparation of technical support documentation to inform the Environmental Impact Statement for a large potash mining project in western Utah. Technical services included preparation of air quality modeling protocol, development of emission inventories, modeling with AERMOD, characterization of fugitive dust PM_{2.5} and PM₁₀ at the site, and engagement with lead and cooperating agencies (U.S. BLM, Utah DEQ and EPA).



NEPA EIS for BLM Federal-authorized Actions

The Bureau of Land Management (BLM) prepared a Resource Management Plan prepared the National Environmental Policy Act (NEPA) to understand impacts from production of gas (methane) and oil. Led the development of construction and operations emissions inventories using MOVES, EPA AP-42 guidance. Led air quality modeling of particulate matter, ozone and other criteria pollutants and atmospheric deposition with CAMx. Led the preparation of GHG gas emission inventories and preparation of the Climate Change section of the NEPA EIS and Resource Management Plan (RMP) for the U.S. BLM to guide the management of BLM-administered lands in the states of Oklahoma, Texas, and Kansas. Work included engagement with EPA and other federal/state agencies.

NEPA EIS for Gold Mine

Directed a multi-pronged monitoring/modeling study and prepared technical support documents for the EIS for a proposed open pit gold mining project in Alaska. This included meteorological modeling with WRF, design of an air monitoring program, characterization of the impact of a natural gas pipeline, fugitive dust, processing, as well as global, regional, and local-scale air quality modeling (CALPUFF, CMAQ, GEOS-Chem) of anthropogenic and natural sources.

Gravel Quarry Ambient Air Monitoring

Led an ambient air monitoring and data analysis study near a gravel quarry in response to public complaints about fugitive dust. Samples were taken at upwind and downwind locations with a FRM filter-based sampler for PM₁₀ and particulate metals, a summa canister for VOC, and polyvinyl chloride (PVC) filter and aluminum cyclone for respirable silica. The measurements were compared to the NAAQS and EPA Regional Screening Levels and other monitoring data in the state.

Air Watershed Model Linkage

Designed, developed, and applied an interface between two advanced atmospheric and aquatic models in coordination with watershed modelers to trace the fate of mercury, sulfur, and nitrogen compounds from air emissions to ecosystem impacts.

CAREER

2010 – Current: Principal, Ramboll

1997-2010: Project Manager, Atmospheric and Environmental Research, Inc.

AFFILIATIONS

National Association of Environmental Professionals

Air and Waste Management Association

EXPERT WITNESS TESTIMONY

- Testified on mercury atmospheric deposition before Colorado Air Quality Control Commission
- Testified on mercury emission control impacts before Illinois Pollution Control Board
- Currently engaged in a PFAS matter as an expert witness

AWARDS

Winning team in a national NEPA Artificial Intelligence competition organized by the U.S. Department of Energy Pacific Northwest National Laboratory called “LLMs for Environmental Reviews”, July 2024

NEPA TRAINER EXPERIENCE

NEPA Training workshops for environmental professionals in the United States, 2023 and 2024.

SELECTED PUBLICATIONS AND PRESENTATIONS (OUT OF OVER 50)

Vijayaraghavan, K., 2024. “Using Artificial Intelligence to Improve the Efficiency of NEPA Reviews”. National Association of Environmental Professionals Annual Conference. Minneapolis, May.



Vijayaraghavan, K., 2024. "PFAS Assessment Overview". Invited Speaker. Casualty Catastrophes and Emerging Liability Risks - AMBest Review & Preview Conference. San Antonio, Texas, March.

Vijayaraghavan, K., 2023. "PFAS Atmospheric Deposition Modeling". National Atmospheric Deposition Program Scientific Symposium. Madison, Wisconsin, October.

Vijayaraghavan, K., 2023. "Air Quality Impact Assessment in Offshore Wind Energy Projects". CMAS Annual Conference, Chapel Hill, October.

Vijayaraghavan, K., E. Ravn Nielsen. 2022. "Power-to-X and Green Hydrogen Implications in the United States". Invited Speaker. 25th Annual Energy, Utility and Environment Conference. Tucson, Arizona, October

Vijayaraghavan, K., C. Pollman. 2020. "Mercury Emission Sources and Contributions of Atmospheric Deposition to the Everglades". Book Chapter in Mercury and the Everglades: A Synthesis and Model for Complex Ecosystem Restoration by Springer Press.

Cho, S., K. Vijayaraghavan, D. Spink, B. Cosic, M. Davies, J. Jung. 2017. "Assessing the effects of oil sands related ozone precursor emissions on ambient ozone levels in the Alberta oil sands region, Canada". *Atmos. Env.*, 168, 62-74.

Vijayaraghavan, K., C. Lindhjem, B. Koo, A. DenBleyker, E. Tai, T. Shah, Y. Alvarez, G. Yarwood. 2016. Source Apportionment of Emissions from Light Duty Gasoline Vehicles and other Sources in the United States for Ozone and Particulate Matter. *Journal Air and Waste Manag. Assoc.*, 66, 98-119.

Vijayaraghavan, K., S. Cho, R. Morris, D. Spink, J. Jung, R. Pauls, K. Duffett. 2016. "Photochemical model evaluation of the ground-level ozone impacts on ambient air quality and vegetation health in the Alberta oil sands region: Using present and future emission scenarios." *Atmos. Env.*, 141, 209.

Vijayaraghavan, K., A. DenBleyker, L. Ma, C. Lindhjem, G. Yarwood. 2014. "Trends in On-Road Vehicle Emissions and Ambient Air Quality in Atlanta, Georgia, USA From the Late 1990s Through 2009." *Journal of Air and Waste Management Association*.

Vijayaraghavan, K., L. Levin, L. Parker, G. Yarwood, and D. Streets. 2014. "Response of Fish Tissue Mercury in a Freshwater Lake to Local, Regional, and Global Changes in Mercury Emissions." *Environ Toxicol Chem*, Jun; 3 (6): 1238-47.

Vijayaraghavan, K., C. Lindhjem, A. DenBleyker, U. Nopmongcol, J. Grant, E. Tai, G. Yarwood. 2012. "Effects of Light Duty Gasoline Vehicle Emission Standards in the United States on Ozone and Particulate Matter." *Atmos. Environ.*, 60, 109-120, [dx.doi.org/10.1016/j.atmosenv.2012.05.049](https://doi.org/10.1016/j.atmosenv.2012.05.049).

Vijayaraghavan, K., J. Herr, S.-Y. Chen, E. Knipping. 2010. "Linkage Between an Advanced Air Quality Model and a Mechanistic Watershed Model." *Geosci. Model Dev. Discuss.*, 3, 1503-1548.

Vijayaraghavan, K., C. Seigneur, R. Balmori, S-Y. Chen, P. Karamchandani, J.T. Walters, J.J. Jansen, J.E. Brandmeyer, E.M. Knipping. 2010. "A Case Study of the Relative Effects of Power Plant NO_x and SO₂ Emission Reductions on Atmospheric Nitrogen Deposition." *J. Air Waste Manag.*, 60, 287-293.

Vijayaraghavan, K., Y. Zhang, C. Seigneur, P. Karamchandani, H. E. Snell. 2009. Export of Reactive Nitrogen from Coal-Fired Power Plants in the US: Estimates from a Plume-In-Grid Modeling Study." *J. Geophys. Res.*, 114, D04308, doi: [10.1029/2008JD010432](https://doi.org/10.1029/2008JD010432).

Vijayaraghavan, K., H.E. Snell, C. Seigneur. 2008. "Practical Aspects of Using Satellite Data in Air Quality Modeling." *Environ. Sci. Technol.*, 42, 8187-8192.

Vijayaraghavan, K., P. Karamchandani, C. Seigneur, R. Balmori, S.-Y. Chen. 2008. "Plume-In-Grid Modeling of Atmospheric Mercury." *J. Geophys. Res.*, 113, D24305, doi: [10.1029/2008JD010580](https://doi.org/10.1029/2008JD010580).

Vijayaraghavan, K., C. Seigneur, P. Karamchandani, S-Y. Chen. 2007. "Development and Application of a Multi-Pollutant Model for Atmospheric Mercury Deposition." *J. Applied Meteorology and Climatology*, 46, 1341-1353.